

AMENDMENTS TO THE CLAIMS

**List of Claims:**

1. (Original) A method of manufacturing a magnetic film comprising steps of:

forming a magnetic layer on a substrate; defining a first area and a second area of the magnetic layer;

treating the first area of the magnetic layer with an ion beam to form a first area having a first direction; and

treating the second area of the magnetic layer with an ion beam in a magnetic field to form a second easy axis having a second direction.

2. (Currently Amended) The method of manufacturing a magnetic film of claim 1 wherein the magnetic ~~layer~~ layer comprises an rare earth material selected at least one of Pt, Pd, Au, and Tb.

3. (Original) The method of manufacturing a magnetic film of claim 1 wherein the angle difference between the direction of the first easy axis and that of the second easy axis is from 60° to 90°.

4. (Original) The method of manufacturing a magnetic film of claim 1 wherein the magnetic layer comprises a transition metal selected at least one of Co, Ni, and Fe.

5. (Original) The method of manufacturing a magnetic film of claim 1 wherein the beam comprises an inert gas selected at least one of He, Ne, Ar, Xe, and Kr.

6. (Currently Amended) A method of manufacturing a magnetic film comprising steps of:

forming a magnetic layer on a substrate; and  
applying an ion beam into a selected area of the magnetic layer to form a first easy axis having a first direction; and  
applying a magnetic field to the magnetic film and applying an ion beam into another selected area of the magnetic layer to form a second easy axis having a second direction.

7. (Cancelled)

8. (Original) The method of manufacturing a magnetic film of claim 6 wherein the magnetic layer comprises a transition metal selected at least one of Co, Ni, and Fe.

9. (Original) The method of manufacturing a magnetic film of claim 6 wherein the beam comprises an inert gas selected at least one of He, Ne, Ar, Xe, and Kr.

10. (Currently Amended) A method of manufacturing a magnetic film comprising steps of:

forming a magnetic layer on a substrate; and

treating the magnetic layer with an ion beam to form ~~an~~ a first easy axis having a first direction; and

applying a magnetic field to the magnetic film and treating the magnetic layer with an ion beam to form a second easy axis having a second direction

11. (Original) The method of manufacturing a magnetic film of claim 10 wherein the magnetic layer comprises a transition metal selected at least one of Co, Ni, and Fe.

12. -13. (Cancelled)

14. (Original) A method manufacturing a magnetic film comprising steps of:

forming a magnetic layer on a substrate;

covering the magnetic layer with a first mask opening a first area;

treating the first area with an ion beam to form an first easy axis;

rotating the magnetic layer in some degree;

covering the magnetic layer with a second mask opening a second area; and

treating the second area with an ion beam to form an second easy axis.

15. (Currently Amended) A method manufacturing a magnetic film comprising steps of:

forming a magnetic layer on a substrate;

covering the magnetic layer with a first mask opening a first area;

treating the first area with an ion beam in a magnetic field to form an first easy axis;

rotating the magnetic layer in some degree;

covering the magnetic layer with a second mask opening a second area; and

treating the second area with an ion beam in a magnetic field to form an a second easy axis.